FIGURE 9. Aβ and Zn$^{2+}$ cross-seeding. A, Maximal ThT fluorescence of Aβ$_{(1-40)}$ (grey) and Aβ$_{(1-42)}$ (black) with 0.4 equivalents of Zn$^{2+}$, which after a week was used to seed monomeric Aβ (1$^{st}$ seeding), which in turn was also used to seed monomeric Aβ (2$^{nd}$ seeding), which again was used to seed monomeric Aβ (3$^{rd}$ seeding). Seeds were 10% of final volume. Fluorescence is presented as a percentage of ThT fluorescence for mature Aβ$_{(1-40)}$ and Aβ$_{(1-42)}$ fibres grown in the absence of Zn$^{2+}$ the dotted line. Fibre growth was carried out at pH 7.4, with 10 μM Aβ, 30 mM HEPES, 10 mM NaCl and agitation, at 30 °C. B – E. Representative TEM images of Aβ$_{(1-42)}$ and Aβ$_{(1-40)}$ grown with 0.4 equivalents of Zn$^{2+}$ (B,C); 2$^{nd}$ seeding for Aβ$_{(1-42)}$ and Aβ$_{(1-40)}$ contains 0.004 equivalents of Zn$^{2+}$ (D,E). Samples were stained with phosphotungstic acid. Scale bars are 500 nm. Zn$^{2+}$ generated assemblies could not seed similar assemblies once Zn$^{2+}$ was diluted.